haptic array **326** includes, or is connected to, electro-mechanical means to translate electrical control signals from the MMI **339** to mechanical control of individual haptic elements of the haptic array **326**.

[0042] The software also includes various modules, protocol stacks, drivers, etc., which are commonly designated as **337** and which provide communication services (such as transport, network and connectivity) for an RF interface **333**, and optionally a Bluetooth™ interface **334** and/or an IrDA interface **335** for local connectivity. The RF interface **333** comprises an internal or external antenna as well as appropriate radio circuitry for establishing and maintaining a wireless link to a base station (e.g., the link **102** and base station **104** in FIG. **1**). As is well known to a person skilled in the art, the radio circuitry comprises a series of analogue and digital electronic components, together forming a radio receiver and transmitter. These components include, i.a., band pass filters, amplifiers, mixers, local oscillators, low pass filters, AD/DA converters, etc.

[0043] The mobile terminal also has a SIM card **330** and an associated reader. As is commonly known, the SIM card **330** comprises a processor as well as local work and data memory.

[0044] Now follows a scenario presenting a user interface according to an embodiment.

[0045] FIGS. **4***a-b* illustrate the use of a haptic user interface for media control that can be embodied in the mobile terminal of FIG. **2**. User interface components are created by raising haptic elements of a haptic array **426** (such as the haptic array **226**) of a mobile terminal **400** (such as the mobile terminal **200**). Consequently, as seen in FIG. **4***a*, user interface components such as a "play" component **452**, a "next" component **453**, a "previous" component **450**, a "raise volume" component **451**, a "lower volume" component **454** and a "progress" component **455** are generated by raising corresponding haptic elements of the haptic array. The geometrical configuration, or shape, of the components correspond to conventional symbols, respectively. Optionally, the components can be generating by lowering haptic elements, whereby haptic elements not associated with user interface components are in a raised state, which could for example be used to indicate that the user interface is locked to prevent accidental activation. User pressure of these components can also be detected, whereby software code associated with the component is executed. Consequently, the user e.g. merely has to press the next component **453** to skip to a next track. This allows for intuitive and easy user input, even when the user can not see the display. If the user presses the play component **452**, the media, e.g. music, starts playing and the haptic array **426** of the mobile terminal **400** changes to what can be seen in FIG. **4***b*. Here a pause component **457** has now been generated in a location where the play component **452** of FIG. **4***a* was previously generated. In other words, output is generated from the controller **331** corresponding to the state of the media player application, in this case shifting from a non-playing state in FIG. **4***a* to a playing state in FIG. **4***b*. Because of the general and adaptive nature of the matrix style haptic array, the haptic array **426** can be used for any suitable output. The mobile terminal **400** can thereby provide output to, and receive input from, the user, allowing the user to use the mobile terminal using only touch. Although the haptic elements are here presented in a matrix, any suitable arrangement of haptic elements can be used.

[0046] FIG. **5** illustrates the use of a user interface for alerts that can be embodied in the mobile terminal of FIG. **2**. Here, an alert **560** is generated on the haptic array **526** (such as haptic array **226**) of the mobile terminal **500** (such as mobile terminal **200**). While in this example, the alert **560** depicts an envelope indicating that a message has been received, the alert can be any suitable alert, including a reminder for a meeting, an alarm, a low battery warning, etc. Optionally, when the user presses the alert **560** of the haptic array **526**, a default action can be performed. For example, when the alert is a message alert, the mobile terminal **500** can output the message to the user using voice synthesis, such that the user can hear the message.

[0047] FIG. **6** illustrates the use of a user interface for online activity monitoring that can be embodied in the mobile terminal of FIG. **2**. In this embodiment, different zones **661-665** are associated with different types of activity. The zones are mapped to various content channels to provide the user with the ability to monitor activity in blind-use scenarios. For example, in this embodiment, the centre zone **663** is associated with messages from personal contacts, the top left zone **661** is associated with MySpace® activity, the top right zone **662** is associated with Flickr™ activity, the bottom right zone **664** is associated with Facebook activity and the bottom left zone **665** is associated with a particular blog activity. The zones can optionally be configured by the user. The activity information is received to the mobile terminal using mobile networks (**110** of FIG. **1**) and wide area network (**112** of FIG. **1**) from a server (**115** of FIG. **1**). For example, the protocol Really Simple Syndication (RSS) can be used for receiving the activity information. Optionally, when the user presses a user interface component in one of the zones **661-665**, the mobile terminal **600** can respond by ouputting, using voice synthesis, a statement related to the user interface component in question. For example, if the user presses on the user interface component in the top right zone **664**, which is associated with Flickr™, the mobile terminal **600** can respond by saying "5 new comments on your pictures today". When the user interacts with the haptic elements (e.g. by pressing), this can optionally also generate metadata. This metadata can be used in the mobile terminal **600** or transmitted to the content source, stating that the user is aware of the content associated with the interaction and may have even consumed it. This adds valuable information, albeit low level, of metadata that supports communication and better alignment between the user and involved external parties.

[0048] FIG. **7** is a flow chart illustrating a method according to an embodiment that can be executed in the mobile terminal of FIG. **2**.

[0049] In an initial generate haptic UI (user interface) components step **780**, haptic user interface components are generated on the haptic array **226** of the mobile terminal **200**. This can for example be seen in more detail in FIG. **4***a* referenced above.

[0050] In a detect user input on haptic UI component step **782**, user input is detected using the haptic array. The details of this are described above in conjunction with FIG. **2***c* above.

[0051] In a execute associated code step **784**, the controller executes code associated with the user input of the previous step. For example, if the user input is associated with playing music in the media player, the controller executes code for playing the music.

[0052] Although the invention has above been described using an embodiment in a mobile terminal, the invention is applicable to any type of portable apparatus that could benefit from a haptic user interface, including pocket computers,